

SUPPORT FOR THE AMENDMENT

Support for the amendment to claim 1 is found on page 23, lines 10-16 of the specification. No new matter would be added to this application by entry of this amendment.

Upon entry of this amendment, claims 1-20 will remain active in this application.

REQUEST FOR RECONSIDERATION

The claimed invention is directed to a process for preparing at least one polyisocyanate.

Isocyanate preparation by reaction of amine with phosgene is generally known. However issues as to yield and space-time yields prompts further investigation into efficient preparation methods of isocyanates.

The claimed invention addresses this problem by providing a process for preparing at least one polyisocyanate by reacting organic amine and phosgene in an inert solvent, in **at least three stages**, the pressure in each successive stage being **lower than the previous stage**, and wherein in the third stage, a carbamoyl chloride is dissociated into isocyanate and hydrogen chloride. Applicants have discovered that such a process in which the pressure is successively lower in at least three sequential stages, allows for the efficient production of polyisocyanates. Such a process is nowhere disclosed or suggested in the cited art of record.

The rejections of claims 1-7 and 10 and 13 under 35 U.S.C. §102(a) and claims 1-7, 10-15 and 18-20 under 35 U.S.C. §103(a) each over WO 03/045900 and of claims 1, 8-9 and 16-17 under 35 U.S.C. §103(a) over WO 03/045900 in view of Beck U.S. 2,822,373 are respectfully traversed.

Applicants note that WO 03/045900 was published on June 5, 2003, after applicants' German priority date of December 19, 2002. In order to perfect applicants' claim to priority, applicants enclose herewith a certified English language translation of DE 102 60 082.1. A certified copy of DE 102 60 082.1 was submitted to the international bureau in PCT Application PCT/EP03/14185. In view of applicants' request for priority, WO 03/045900 would not be available as prior art against the claimed invention and accordingly, withdrawal of the rejections under 35 U.S.C. §102(a) and 35 U.S.C. §103(a) is respectfully requested.

The rejection of claims 1-2, 4, 7-9, 11-13 and 16-20 under 35 U.S.C. § 102(b) over Beck U.S. 2,822,373 is respectfully traversed.

Beck fails to disclose or suggest dissociation of carbamoyl chloride into isocyanate and hydrogen chloride in a third stage.

The office action relies on figure 1 of the reference, asserting three stages of 1) a mixing apparatus, 2) a reservoir and 3) a purification stage and that the pressure in each stage must be inherently lower. The reference describes introduction of organic amine into a solution of phosgene, which is converted into isocyanate, exhaustion of HCl and excess phosgene gases and isolation of isocyanate from organic solvent by distillation. (column 1 lines 2-50). Thus, in the first and second stages organic amine and phosgene are converted to isocyanate and HCl and phosgene are exhausted. In the **third stage isocyanate is purified from organic solvent by distillation**. There is no disclosure of decomposition of a carbamoyl chloride into isocyanate and HCl, **in the third stage**.

In contrast, the claimed invention is directed to a polyisocyanates producing process in which at least three stages are used, the pressure is reduced in successive stages and in which **in the third stage**, isocyanate and HCl are formed by decomposition of a carbamoyl chloride. Applicants note that the claims have been amended to indicate that in the third stage isocyanate and HCl are formed by decomposition of a carbamoyl chloride. Since Beck fails to suggest a third stage in which isocyanate and HCl are formed by decomposition of a carbamoyl chloride, the claimed invention is not anticipated by the cited reference.

Further the claimed invention would not have been obvious from the cited reference as the reference describes **formation of isocyanate in the first stage**. Since the isocyanate is formed **in the first stage**, it would not have been obvious to form isocyanate and HCl in the third stage by decomposition of a carbamoyl chloride. Further since HCl is exhausted **prior**

**to the third stage**, it would not have been obvious to decompose a carbamoyl chloride into isocyanate and HCl in a third stage.

In view of the deficiencies of the cited reference, withdrawal of the rejection under 35 U.S.C. §102(b) is respectfully requested.

The objection to claim 15 has been obviated by the amendment suggested by the examiner.

Finally, applicants note applicants' information disclosure statement of July 18, 2005 in which entries AL-BAR were discussed in applicants' specification, satisfying the "concise explanation of the relevance" requirement of 37 C.F.R. 1.98 (a)(3)(i). Each entry is believed to be in compliance with the requirement of 37 C.F.R. 1.97 and 1.98. Indication of full consideration of each of these references is respectfully requested (M.P.E.P. §§ 609.01). Further references AJ and AK were cited in the international search report, the search report and copies of the documents being indicated as present in the national stage file on form PTC/DO/EO/903 such that consideration thereof by the examiner is required (M.P.E.P. §§ 609.03).

Applicants submit that this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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